

CRE-excisable EGFP Lentifect™ Purified Lentiviral Particles

Cat. No. LP806-025, LP806-100

Ready-to-use lentiviral particles for the transduction of a variety of mammalian cells including difficult-to-transfect, primary, stem and non-dividing cells.

Description

Gene: EGFP
Promoter: EF1 α
Tag: N/A
Reporter: N/A
Resistance marker: N/A
Additional note: N/A

LoxP sequences were inserted to the 5'LTR and 3'LTR region. The viral transgene insertion can be excised by CRE recombinase.

GeneCopoeia Lentifect™ Lentiviral Particles are produced from a standardized protocol using purified plasmid DNA and the proprietary reagents, EndoFectin™ Lenti (for transfection) and TiterBoost™ solution. The protocol uses a third generation self-inactivating packaging system meeting BioSafety Level 2 requirements.

Contents and storage

Provided as 1 vial of 25 μ l or 4 vials of 25 μ l of purified EGFP lentiviral particles with titers of $\sim 1 \times 10^8$ TU/ml.

Lentifect particles are shipped on dry ice and must be stored at -80°C immediately upon receipt. Avoid repeated freeze-thaw cycles as this will reduce titers.

Quality control

The lentiviral expression construct was validated by full-length sequencing, restriction enzyme digestion and PCR-size validation using gene-specific and vector-specific primers. Product is confirmed free of bacteria, fungi and common Mycoplasma contamination.

Viral titer

The transduction unit (TU or IFU) of the lentiviral particles was estimated using the formula $1TU=100$ copies of viral genomic RNA. The physical copy numbers of the viral genomic RNA was determined using qRT-PCR. The customer should test the transduction at MOI=0.3, 1, 3, 5, 10 for their specific cell lines in order to get the best transduction efficiency.

Overview of production

The EGFP OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. CSEGFP-Lv195-04). This plasmid was co-transfected into 293Ta cells (GeneCopoeia Cat. No. LT008) with the Lenti-Pac HIV Packaging Mix (GeneCopoeia Cat. No. LT001). Lentivirus containing supernatants were harvested 48 hours after transfection and stored at -80°C.

User manual

Please contact GeneCopoeia for a copy or download at: <https://www.genecopoeia.com/wp-content/uploads/2018/03/Lentivirus-protocol-GeneCopoeia.pdf>

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